

# **Capstone STC Master Drawing List**

Part Number: 560-1027-03

Document Revision: B

March 10, 2003

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### Revision Log

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03 B	Mar 10, 2003	Updated for SW changes up to V4.1 MX20, V3.5 GX50/60, and v2.5 GPS (changed MDL, AFM, Sys Config Index versions in section 2.1 table). Added ICA to section 2.1 table.	7587	MAK		

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## 1 Introduction

### 1.1 Purpose

The purpose of this document is to list the data required to support STC installation of the UPS Aviation Technologies (UPS AT) Capstone system in accordance with STC requirements and to list other data associated with the STC which is not required for installation.

### 1.2 Scope

This document applies to the Capstone STC. This document includes general installation requirements, special installation instructions, and it provides an index of STC data including both data required for installation and data associated with the STC, but not required for installation.

### 1.3 Capstone STC includes Approved Model List

The STC includes an approved model list that should be consulted for applicability to each installation. If the installation is covered under the STC, then the approved AFM can be directly used for that installation. The installer should complete page 1 of the AFM (add make/model, registration number and serial number) and include it with the aircraft's existing flight manual.

## 2 Data Required for Installation

### 2.1 Installation Data

Documents should be the versions listed or later FAA approved versions.

Doc No.	Description	REV
560-1027-03	Capstone Master Drawing List	B
560-1028-03	Capstone AFM Supplement	A
560-1029-02	Capstone System Configuration Index	B
560-1024-03	Capstone System Installation Instructions	-
560-1040-00	Capstone System Instructions for Continued Airworthiness	-
560-0959-03	Apollo GX60 Installation Instructions	C
560-1025-04	Apollo MX20 Installation Instructions	-
560-0949-01	Apollo GPS Antenna Installation Instructions – A33	-
560-0215-03	UAT Datalink Antenna Installation Instructions	-
930005	Altitude Encoder Installation Instructions	A
424-1004-000	Capstone Installation kit	F
560-1026-03	MX20 User's Guide	-
560-1070-00	MX20 User's Guide Supplement (required when using MX Users Guide 560-1026-02)	-
560-0961-02	Apollo GX GPS User's Guide	-
560-0963-02	Apollo GX Comm User Manual Supplement	-

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### 2.2 Related Data (Substantiating Data)

The following documents contain information related to this STC but are not required for follow-on installations.

Doc No.	Description	REV
PD3503	Capstone System Certification Plan	B
PD4043	Capstone Phase 2 FIS/TIS Certification Plan	-
PD6000	Capstone Phase 3 Radar-like Services Certification Plan	B
500-0376-00	Cable Assembly, TNC / RA-TNC, 2FT	A
500-0377-00	Cable Assembly, TNC STYLE RA/TNC RA, 50 FT	-
500-0378-01	Cable Assembly, MX/GX TO 50PIN CAPSTONE	-
500-0379-01	Cable Assembly, 50 PIN TO UAT/PWR/ALT ENC	-
560-5047-00	Apollo GPS Antenna Installation Instructions – A34	-
310-0429-01	Mounting Tube, MFD	F
310-0661-00	Mounting Tray, Capstone UAT	B
PD3513	UAT Environmental Test Report	D
PD1217	ADS-B UAT Software Accomplishment Summary	B
PD1218	ADS-B UAT Software Configuration Index	B
PD1415	MX20 System Safety Assessment	A
PD1438	MX20 MFD Application S/W Accomplishment Summary	E
PD1439	MX20 MFD Application DO178 S/W Configuration Index	E
PD1455	MX20 MFD BIOS S/W Accomplishment Summary	-
PD1456	MX20 MFD BIOS DO178 S/W Configuration Index	-
BD3250	Unit Configuration MX20 (with GPS)	R
BD3273	Unit Configuration MX20 All Variations	-
BD3262	Unit Configuration Apollo UAT Sensor	B
565-0298-00	Label, UAT nameplate (serial number)	A
565-0293-00	UC Tag MX20	D
565-0294-00	LBL, MX20, Terrain database	-
565-0295-00	Label MX20 Worldwide database	A
	GX TSO C129 letter	
	GX TSO C37, C38 & C128 letter	
	Altitude Encoder TSO letter	
	MX TSO C110a & C113 letter	

### 2.3 Reference Documents

The following documents are used as reference for the installation.

- FAA AC 43.13-1B, Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair
- FAA AC 43.13-2A, Acceptable Methods, Techniques, and Practices - Aircraft Alterations
- FAA AC 20-67B, Airborne VHF Communications Equipment Installation
- FAA AC 20-138, Airworthiness approval of GPS

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### 3 Parts List & Equipment Configuration

Please refer to the Capstone System Configuration Index (560-1029-02 or most recent) for documentation that provides information about all current, valid configurations of Capstone or related equipment.

### 4 General Installation Requirements

#### 4.1 General

The installation must be done in accordance with all applicable FARs. The installation shall conform to the data listed in section 2.1 Data Required for Installation.

#### 4.2 Mechanical

Mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems must conform to those specific instructions or requirements found in the STC data. In any area where specific installation instructions or requirements are not provided in the STC data, the installer shall conform to the recommended practices and procedures found in AC 43.13-2A, Chapter 2, Radio Installations, and Chapter 3, Antenna Installations; AC 43.13-1B, Chapter 11, Electrical Systems, Section 3,4,7 and 8.

#### 4.3 Hardware

Hardware not supplied with the equipment, or otherwise specified in the appropriate installation manuals or other STC data (ie screws, nuts, tie wraps.... etc) should be from standard aircraft hardware as described by AC 43.13-1B, Chapter 5, Aircraft Hardware.

#### 4.4 Wiring

All wire used in the installation should be of appropriate standard aircraft quality grade and size as described in AC 43.13-1B, Chapter 11, Sections 5-20.

#### 4.5 Circuit Protection

All circuits must be protected in accordance with AC 43.13-1B, Chapter 11, Section 4, Circuit Protection Devices.

#### 4.6 Electrical Load Analysis

An electrical load analysis should be preformed on each aircraft, as described in AC 43.13-1B, Chapter 11 Section 3.

### 5 Special Installation Instructions

None